

ABSTRACT OF THE DISCLOSURE

A method of inducing an antigen-specific immune response in a mammalian subject includes the steps of administering to the subject an effective amount of a
5 first composition comprising a DNA plasmid comprising a DNA sequence encoding an antigen under the control of regulatory sequences directing expression thereof in a mammalian or vertebrate cell. The method also includes administering to the subject an effective amount of a second composition comprising a recombinant vesicular
10 stomatitis virus (rVSV) comprising a nucleic acid sequence encoding the antigen under the control of regulatory sequences directing expression thereof in the mammalian or vertebrate cell. The rVSV is in one embodiment replication competent. Kits for use in immunizations and therapeutic treatments of disease include the components and instructions for practice of this method.